

# Pavement Widening on Resurfacing Projects for Non-NHS Highways

Design Manual

Chapter 7

Pavement

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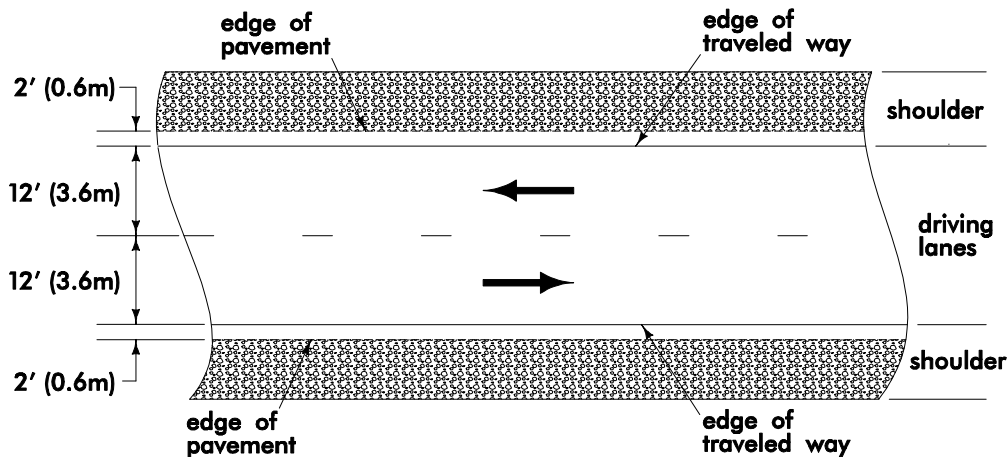
Revised: 01-23-04

Non-NHS highways that do not qualify for paved shoulders and that have lane pavement widths of 12 feet (3.6 meters) or less should be widened to 14 feet (4.2 meters).

## Design Considerations

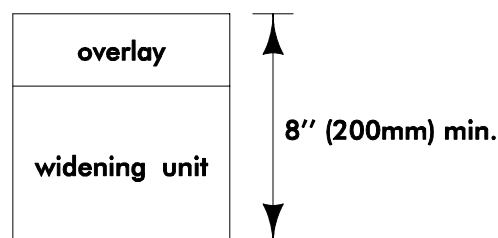
Areas where a widening unit has already been placed should be evaluated on a case-by-case basis to determine if an additional widening unit is appropriate. In most cases, the roadway will be widened.

Two lane highways should have 14-foot (4.2-meter) pavement widths for both lanes. As Figure 1 shows, the white edge line should be painted 12 feet (3.6 meters) from the centerline, leaving a 2-foot (0.6-meter) section at the pavement edge, which is considered part of the shoulder.



**Figure 1:** Lane markings for widened pavement.

For PCC pavement widening, use Standard Road Plan RG-1. For HMA pavement widening, use Standard Road Plan RG-8. The thickness of the widening unit plus overlay should total a minimum of 8 inches (200 millimeters), see Figure 2.



**Figure 2:** Minimum pavement widening thickness.

Fillets should still be used at paved and non-paved sideroads. At entrances, fillets should not be used where the pavement has been widened to 14 feet (4.2 meters). However, if there are fillets at entrances already in place due to an earlier resurfacing project, they should be resurfaced.

Shoulder rumble strips on the outermost two feet (0.6 meters) of the pavement should not be used on resurfacing projects.

## Highways That Should Not Be Widened

Highways with less than a 32-foot (9.6-meter) top (width of existing lanes and shoulders) should not be widened because a minimum two-foot (0.6-meter) granular shoulder is desirable outside of the pavement to stabilize the widening unit.

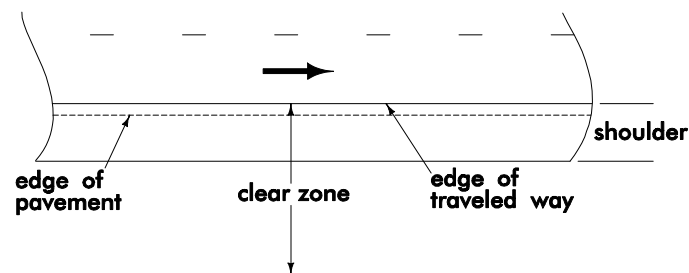
Where the lane pavement widths must remain at 12 feet (3.6 meters) or less, fillets should be used at non-paved side roads and entrances.

## Shoulders

On a widened pavement, the designer should regard the 2-foot (0.6-meter) section of pavement outside the traffic lane as part of the normal shoulder, as Figure 1 shows. The normal shoulder will be composed of the 2-foot (0.6-meter) pavement width outside the traffic lane plus the additional width added to complete the shoulder.

## Clear Zones on Widened Pavement

Figure 3 shows the clear zone to be used with a widened pavement. In all cases, the clear zone is measured from the edge of the traveled way, not from the edge of the widened part.



**Figure 3:** Clear zones on widened pavement.